

We claim:

1. A process for hydrogenating aromatic nitro compounds to the corresponding amines in the presence of hydrogenation catalysts, which comprises using hydrogenation catalysts in which nickel and platinum are present on a support in the form of an alloy having an atomic ratio of nickel to platinum in the alloy of between 30:70 and 70:30.
- 5 2. The process according to claim 1, wherein the aromatic nitro compound used is dinitrotoluene.
- 10 3. The process according to claim 1, wherein the atomic ratio of nickel to platinum in the alloy is between 40:60 and 60:40.
- 15 4. The process according to claim 1, wherein the atomic ratio of nickel to platinum in the alloy is between 45:55 and 55:45.
- 5 5. The process according to claim 1, wherein the catalyst is used in an amount of from 0.01 to 10% by weight, based on the reaction mixture.
- 20 6. The process according to claim 1, wherein the catalyst is used in an amount of from 0.1 to 5% by weight, based on the reaction mixture.
7. The process according to claim 1, wherein the catalyst is used in an amount of from 0.2 to 2% by weight, based on the reaction mixture.
- 25 8. The process according to claim 1, wherein the hydrogenation is carried out at a temperature in the range from 80 to 250°C.
- 30 9. The process according to claim 1, wherein the catalyst used is used at its loading limit.
10. A catalyst which comprises nickel and platinum on a support in the form of an alloy having an atomic ratio of nickel to platinum in the alloy of between 40:60 and 60:40, wherein the support is selected from the group comprising activated carbon, carbon black and graphite.
- 35 11. The use of catalysts according to claim 10 for hydrogenating dinitrotoluene.